

**IN THE SPECIFICATION:**

On page 1, immediately after the title, please insert the following heading:

--Background of the Invention--.

On page 4, before line 1, please insert the following heading:

--Summary of the Invention--

On page 13, line 16, please insert the following heading:

--Brief Description of the Drawings--

On page 15, line 8, please insert the following heading:

--Description of Specific Embodiments--.

On page 19, line 4 through page 20, line 8, please amend this paragraph as follows:

Fig. 4 shows an alternative device for limiting the lateral movement of the semiconductor wafer 3 during a rotation of the carrier ring 5. For simplification of the illustration, the support elements 8 are illustrated only schematically as supports. Furthermore, the carrier ring 5 is also not illustrated in Fig. 4. However, in addition to the only schematically indicated support elements 8, pivotable retention devices are provided on the carrier ring 5. In Fig. 4, two retention devices are illustrated, whereby, however, preferably three or any desired other number can be provided. Each of the retention devices 23 is provided with a pivot bearing 25, a limit or stop element 27, a lever arm 28, as well as a weight 30. The pivot bearing 25 is disposed on the carrier ring 5 in a suitable manner in order to enable a pivoting of the limit element 27 in the direction of the axis of rotation A of the carrier ring 5. Fig. 4A shows the position of the limit element 23-27 during a rest position in which the carrier ring 5 does not rotate about the axis of rotation A. Fig. 4B shows the position of the limit elements 23-27 during a rotation of the carrier ring 5 about the axis of rotation A. As a consequence of the centrifugal force that results during the rotation, the weight 30 is pressed outwardly, as a result of which the stop element 27 is moved in the direction of the axis of rotation A. In so doing, the stop element 27 comes into contact with an outer periphery of the

semiconductor wafer 3 that rests upon the support elements 8 and prevents a lateral movement of the wafer. This use of a stop that is controlled by centrifugal force is particularly advantageous in conjunction with inclined support surfaces of the support elements 8, as shown by way of example in Fig. 2, since the inclined support surfaces provide only a limited lateral retention force for the semiconductor wafers 3.

On page 20, lines 14 to 20, please amend this paragraph as follows:

Fig. 5 shows a schematic plan view of a nozzle arrangement for an apparatus for the treatment of disc-shaped substrates pursuant to the present invention. In Fig. 5, a semiconductor wafer 3 is shown as the substrate that is to be treated and that is rotated about an axis of rotation A via a suitable device, such as, for example, the carrier ring 4-5 described in Figures 1 to 4, with such rotation being indicated by the arrow B.

On page 25, line 9, through page 26, line 15, please amend this paragraph as follows:  
In the following, the operation of the treatment apparatus of Fig. 5 will be briefly described. The wafer 3 is first rotated about the axis of rotation A, via a device that is not illustrated in greater detail, as indicated by the arrow B. Subsequently, via the central nozzle 52 as well as the first nozzle group 40, a treatment fluid, such as a treatment liquid, is applied to the rotating wafer. The treatment liquid is applied to the wafer 3 in concentrically extending annular regions. As a consequence of the centrifugal force that results during the rotation, the liquid flows away outwardly and is flung outwardly from the wafer surface. After a prescribed treatment time, first the central nozzle 52 is changed over to a rinsing liquid, i.e. instead of a treatment liquid now a rinsing liquid is conveyed to the wafer 3 via the central nozzle 52. In the region of the central nozzle-5-52, the rinsing liquid displaces the treatment liquid that is found on the wafer. Successively, the nozzles 42a to 42g are now changed over in order to achieve the uniform displacement of the treatment liquid. Alternatively, it is also possible to sequentially change over the nozzles 42a to 42g from the introduction of a treatment liquid to the introduction of a rinsing

liquid in order to achieve a uniform displacement of the treatment liquid from the inside toward the outside. Additionally or alternatively, rinsing liquid is additionally conveyed to the wafer via the nozzles of the second or third nozzle groups 44, 48, whereby the nozzles are respectively sequentially activated from the inside toward the outside, and in particular in conformity with the deactivation of the nozzles 42a to 42g of the first nozzle group. As a result there is achieved that the nozzle via which rinsing liquid is introduced lies closer to the axis of rotation A than the most inwardly disposed nozzle of the first nozzle group via which a treatment liquid is conveyed to the wafer. This enables a good and uniform displacement of the treatment liquid toward the outside.

On page 32, line 13, through page 34, line 4, please amend this paragraph as follows:

After a certain rinsing time, as can be seen in Fig. 9B a drawing fluid is applied to the upper and lower sides of the wafer 3, via the central nozzle 52, in the region of the axis of rotation. The drying fluid 90 is, for example, a fluid that reduces the surface tension of the rinsing fluid 88. As a consequence, a central drying of the wafer results. Subsequently, the nozzle 80a of the first nozzle group 80 is deactivated and the nozzle 80c is activated, so that now rinsing fluid is conveyed onto the upper and lower sides of the wafer via the nozzles 80b and 80c, as can be seen in Fig. 9C. Furthermore, by means of the nozzle 82a of the second nozzle group 82 the drying fluid 90 is now conveyed onto the upper and lower sides of the wafer 3 in order to provide a radial spreading of the central drying region. As can be seen in Figures 9D to 9F, sequentially respectively the innermost (i.e. disposed the closest to the axis of rotation) nozzle of the first nozzle group 80 is deactivated and a more outwardly disposed nozzle is activated, in order to conduct the rinsing fluid onto the upper and lower sides of the wafer 3. In a comparable manner, respectively a nozzle of the second nozzle group 82 that is disposed further from the axis of rotation is used to conduct a drying fluid 90 to the upper and lower sides of the wafer 3 in order to provide a radially expanding drying region. With the view of Fig. 9F, rinsing fluid 88 is applied to the upper and lower sides of the wafer 3 via the two outermost nozzles 80e

and 80f of the first nozzle group 80. If the nozzle 80e is now deactivated, no additional nozzle can be activated, so that the rinsing fluid 88 is conducted onto the wafer 3 exclusively via the outermost nozzle 80f, as can be seen in Fig. 9G. As can be furthermore seen in Fig. 9G, drying fluid is conducted onto the wafer 3 subsequently via the nozzles 82e of the second nozzle group 82 that are disposed inwardly relative to the nozzle 80f after the last nozzle 80f of the first nozzle group 80 is deactivated, drying fluid is conducted onto the wafer 3 via the outermost nozzle 82f, as can be seen in Fig. 9H. This ensures a complete drying of the wafer, even in the edge region of the wafer. Fig. 9 Fig. 9I shows the apparatus 70 after termination of the drying of the wafer 3. The wafer 3 is entirely dried. All of the nozzles are in a deactivated state, and the wafer 3 can now be removed via a non-illustrated handling device.

On page 34, lines 6 through 14, please amend this paragraph as follows:

The switching or control sequence of the individual modules of the apparatus 70 between the views of Fig. 9C and Fig. 9D will be explained in the following with the aid of Figures 10a to 10d.10A to 10D. Fig 10A corresponds to Fig. 9C, while Fig. 10D corresponds to Fig 9D. Figures 10B and 10C represent intermediate steps. As can be seen in Fig. 10A, rinsing fluid 88 is applied to the upper and lower sides of a rotating wafer 3 via the nozzles ~~80B and 80C~~ 80b and 80c. Drying fluid is applied to the wafer 3 via the nozzle 82A 82a. All of the other nozzles are in a deactivated state.

On page 36, after line 10, please insert the following two new paragraphs:

--The specification incorporates by reference the disclosure of German priority document 102 00 525.7 filed January 9, 2002 and PCT/EP02/14632 filed December 20, 2002.

The present invention is, of course, in no way restricted to the specific disclosure of the specification and drawings, but also encompasses any modifications within the scope of the appended claims.--